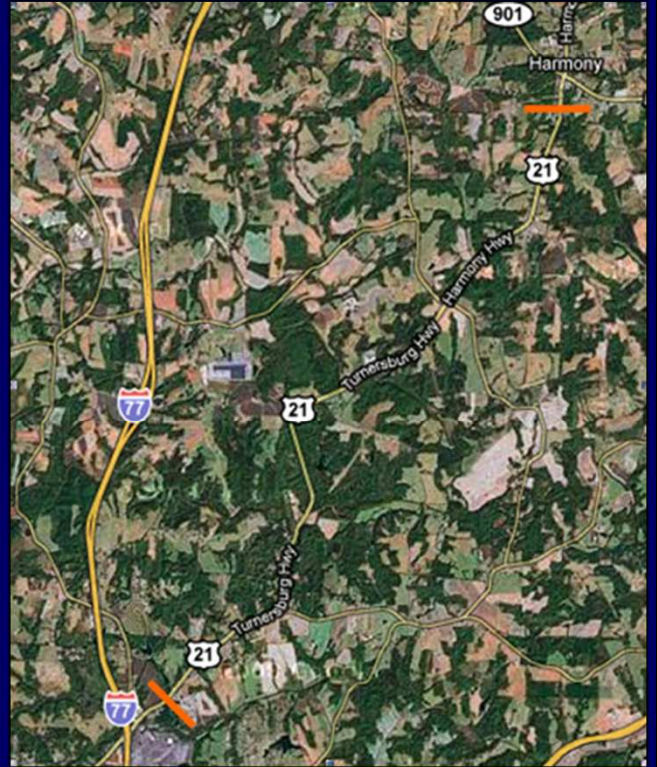


Iredell County – US 21

- Implementation Limits from Prison Camp Road to Southern Limits for the Town of Harmony
 - Completed December 13, 2008
 - Approximately 8.64 Miles
 - Part of Resurfacing
 - Before and After Observational
 - Located and Measured Ruts
 - Photo Log Documentation
 - Before – August 2008
 - After – July 2010 (~ 18 Months)
 - Cross Section 1 and 2



Lets explore the observational before and after data we were able to collect at the Iredell County installation on US 21 installed in December 2008. The before photos were taken in August of 2008 (~6 months prior to safety edge being installed) and the after photos were taken in July of 2010 (~18 months after safety edge being installed). The ruts were located and measured in the before and after period and photos were taken at these sites. The following eleven (11) slides depict some of the before and after photos that were collected at this site. The depth of the ruts are denoted on each picture. The left side is the before period, the right side is the after period. Field inspection at the 6 month after period mark verified that shoulders were pulled flush with new pavement lift. This was a standard resurfacing project and the cross-sectional width remained the same from the before to the after period.

Iredell County – US 21

- Observation Site A



Left side is before (2.0 inch drop-off), right side is after (1.25 inch drop-off). This site re-rutted in the after period. Notice that edge is exposed in the after period and appears to be holding up to traffic.

Iredell County – US 21

- Observation Site B



Left side is before (3.5 inch drop-off), right side is after (1.25 inch drop-off). This site re-rutted in the after period. Notice that edge is exposed in the after period and appears to be holding up to traffic.

Iredell County – US 21

- Observation Site C



Left side is before (4.0 inch drop-off), right side is after (1.75 to 3.0 inch drop-off). This site re-rutted in the after period. Notice that edge is exposed in the after period and appears to be holding up to traffic.

Iredell County – US 21

- Observation Site D



Left side is before (4.0 inch drop-off), right side is after (0.0 to 1.0 inch drop-off). This site DID NOT re-rutted in the after period. Notice that when vehicles do not run-off the road and rut out the edge, soil does stay on the 30 degree slope and grass does grow on that slope.

Iredell County – US 21

- Observation Site E



Left side is before (3.25 inch drop-off), right side is after (0.0 inch drop-off). This site DID NOT re-rutted in the after period. Notice that when vehicles do not run-off the road and rut out the edge, soil does stay on the 30 degree slope and grass does grow on that slope.

Iredell County – US 21

- Observation New Site A



This is a site where a rut did not exist in the before period, but a rut occurred in the after period (1.5 inch drop-off). Notice that edge is exposed in the after period and appears to be holding up to traffic.

Iredell County – US 21

- Observation New Site B



This is a site where a rut did not exist in the before period, but a rut occurred in the after period (2.5 inch drop-off). Notice that edge is exposed in the after period and appears to be holding up to traffic. Notice the tractor-trailer parked in front of the state vehicle. This site is parking for tractor-trailers who eat at the dinner across the street. This edge is getting heavy traffic.

Iredell County – US 21

- Observation New Site C



This is a site where a rut did not exist in the before period, but a rut occurred in the after period (2.75 inch drop-off). Notice that edge is exposed in the after period and appears to be holding up to traffic.

Iredell County – US 21

- Observation New Site D



This is a site where a rut did not exist in the before period, but a rut occurred in the after period (2.75 inch drop-off). Notice that edge is exposed in the after period and appears to be holding up to traffic.